

Role of Water-soluble Vitamins in Reducing the Risk of Cardiovascular Heart Disease in Premature Ovarian Insufficiency Patients

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Objective: To analyse the effect of vitamin B and vitamin C on premature ovarian insufficiency patients who are at higher risk of cardiovascular disease.

Materials and methods: The latest articles on the topic of early menopause and cardiovascular risk were reviewed from PubMed and Science Direct and were interlinked to find solutions.

Results: In premature ovarian insufficiency, oestrogen in the body drops critically. Oestrogen plays a very important role in cardiovascular functions i.e.; low oestrogen levels cause the heart and blood vessels to become stiff and inelastic. Vitamins B2 and B6 play an important role in increasing blood oestrogen levels. These vitamins help reduce cardiovascular diseases by following means. Vitamin B2 helps in preventing oxidative stress, it acts as a potent antioxidant. It also lowers blood pressure.

Vitamin B6 reduces homocysteine in the blood, homocysteine's high level can lead to myocardial infarction and thrombosis. Vitamin B6 prevents hypercholesterolaemia by decreasing LDL levels. Vitamin B12 counteracts increased heart palpitations which is the side effect of vitamin B2. Vitamin C increases oestrogen levels in the body, it is also involved in endometrial thickening. Vitamin C supplementation reduces systolic and diastolic pressure. It is one of the most powerful antioxidants in the body.

Conclusion: These vitamins, if taken in the proper dosage, can reduce the risk of CVD. Also, they can increase the oestrogen level, which is the main concern for patients with premature ovarian insufficiency. The author's best daily recommended dosage in form of capsules are: vitamin B2 (400 mg), vitamin B6 (250 mg), vitamin B12 (500 µg), and vitamin C (500 mg). □